

Efficacy of Feedback Based Therapy, Shanmuga Priya, 2023Abstract

Feedback-Based Therapy For Dysphagia In Post Stroke Patients

Objective

The study was conducted to elaborate the strategies of conventional physiotherapy program for dysphagia rehabilitation in post stroke patients. It examined the functional outcome of the cumulative effect of **surface electromyography (sEMG)** biofeedback adjunct to swallowing exercises.

Results

The researchers found that **sEMG** biofeedback based therapy protocol shows good improvement in post stroke patients with dysphagia. Inclusion of this protocol in therapy may influence standards of care and best practices for post stroke patients.

Participants and Researchers

The study included 12 stroke patients with swallowing difficulty allocated into control and interventional group with six subjects in each group.

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Methods

Swallowing function was evaluated using Functional Oral Intake Scale (FOIS), baseline **surface electromyography** of the suprahyoid muscle and presence of nasogastric tube. The **sEMG** data was recorded using a **NeuroTrac MyoPlus Pro** device (Verity Medical) and **NeuroTrac** software.

Patients in both the groups received conventional **neuromuscular electrical stimulation**, shaker exercises, postural correction, tongue and lip exercises for 20 minutes, once in a day for ten days. The interventional group received **sEMG** feedback based therapy along with conventional therapy for 30 to 40 minutes a day for ten days and the control group received conventional therapy for ten days.

The nasogastric tube was removed in all patients of experimental group after intervention and established initiation of oral feeding. The result showed improvement in functional oral intake scale after intervention. The muscle activity noted in experimental group was greater than the control group

The full abstract can be found at

https://www.researchgate.net/publication/373555277_Efficacy_of_Feedback_Based_Therapy_for_Dysphagia_in_Post_Stroke_Patients#:~:text=Post%20stroke%20dysphagia%20is%20associated%20with%20increased%20mortality,biofeedback%20in%20swallowing%20therapy%20is%20not%20routinely%20used.